

***DRAFT: 9/21/09***

**CLEAN AIR ACT SECTION 112(r) INSPECTION REPORT**

***Sachs Chemical, Inc.  
Caguas, Puerto Rico***

**GENERAL INFORMATION**

<b>Stationary Source</b>	<b>Sachs Chemical, Inc.</b>
<b>Date of Inspection</b>	June 12, 2009
<b>USEPA Inspector</b>	Ellen Banner – USEPA, REGION II (Edison, NJ) Francesco Maimone – USEPA, REGION II (Edison, NJ)
<b>Contract Auditor</b>	Neil Mulvey, Sullivan Group (Subcontractor)
<b>Description of Activities</b>	<ul style="list-style-type: none"><li>• Opening meeting with facility representative.</li><li>• Program audit.</li><li>• Closing meeting with facility representatives.</li></ul> Program audit consisted of the following activities: <ol style="list-style-type: none"><li>1. Document review.</li><li>2. Field verification.</li><li>3. Personnel interviews</li></ol>

**STATIONARY SOURCE INFORMATION**

<b>EPA Facility ID #</b>	1000 0020 2559
<b>Date of Latest Submission (used for RMP inspection)</b>	Receipt Date: May 6, 2008 (First Time)  Anniversary Date: May 2, 2013
<b>Facility Location</b>	P.R. Road 175, Km. 0.02, Lot 18 Rio Canas Industrial Ward Caguas, PR 00725  Tel. (787) 745-2520
<b>Number of Employees</b>	<i>RMP*Submit</i> states 16 employees (per RMP registration). Facility management reported 20 employees. Non-union workforce.

<b>Description of Surrounding Area</b>	The facility is located in an industrial park in a commercial area north of Caguas, PR. The 7,925 square meter property. The facility is bordered by an industrial facility (Servimetal, Inc.) to the north, a creek to the south, a vegetation-covered area to the east, and an abandoned warehouse to the west. There are no residents in the immediate area.
<b>Participants</b>	Participants included representatives from:  Ellen Banner, USEPA – Region II, Edison, NJ Francesco Maimone, USEPA – Region II, Edison, NJ Priscilla Bestard, EHS Specialist – Sachs Chemical, Inc. Jesus M. Medero, P.E., Consultant – JBA Environmental Consulting8  * Lead representative for Sachs Chemical

## REGISTRATION INFORMATION

<b>Process ID #</b>	74967 – HCl Containers Storage
<b>Program Level (as reported in RMP)</b>	Program 2
<b>Process Chemicals</b>	Hydrochloric acid (conc 37% or greater) @ 60,600-lbs.
<b>NAICS Code</b>	42469 (Other Chemical and Allied Products Merchant Wholesalers)

### NOTE:

Several of the RMP programs were reviewed by USEPA inspectors and are therefore not included in this report. Those RMP elements reviewed by USEPA inspectors are duly noted.

## GENERAL COMMENTS

Sachs Chemical, Inc. operates a facility exclusively used for the receipt, storage, and distribution of oils and chemicals. No manufacturing occurs at the facility. All operations are conducted out of a 50,000 square foot building. This storage only facility includes offices, receiving / shipping dock, and warehouse storage.

The facility handles a variety of chemicals, including acids, solvents, and fuels. Some materials (including isopropyl alcohol and hexane) are received in bulk and re-packaged into smaller containers for distribution. 37% hydrochloric acid is received in 55-gals. drums, off-loaded from tractor-trailers, stored in the warehouse, and shipped (no re-packaging). Facility management reported that a maximum inventory of 300 drums. The facility operates day-shift only, M-F.

## RMP DOCUMENTATION

The facility is registered as a Program 2 facility. The facility has a written analysis of why they believe Program 2 applies. As defined by 40 CFR 68.10, Program 2 applies if a process does not meet the eligibility requirements of Program 3 or Program 1. The facility determined that the process is not subject to Program 3 since the process is not one of the listed NAICS codes and was determined to be exempt from OSHA's Process Safety Management (PSM) regulation. The facility determined that the process was exempt from PSM based on the 'retail exemption' (29 CFR 1910.119(a)).

Facility management explained that they distribute materials (including the 37% hydrochloric acid) to pharmaceutical companies and other manufacturers. The facility (under the guidance of their outside consultant) determined that this constitutes sales to 'end users,' since these companies are 'the end users' of the materials in their manufacturing. Based on this assumption, the facility determined that the process was exempt from OSHA's PSM standard and therefore qualified as a Program 2 facility (Program 1 criteria was determined as not applicable).

OSHA has determined that a 'retail facility' is one that receives more than half of its income from the direct sales of the PSM-covered highly hazardous chemical (HHC) to end users. OSHA further defines 'end users' as homeowners (i.e., not other businesses or chain supply stores). As stated above, Sachs Chemical distributes materials (including the 37% hydrochloric acid) to pharmaceutical companies and other manufacturers. The facility therefore receives 100% of its income from sales to other businesses. Facility management explained that they do not distribute or sell 37% HCl to homeowners. The 'retail facility' exemption therefore is not applicable and the process is subject to OSHA's PSM regulation. As a PSM regulated process, RMP Program 3 requirements apply.

Since the facility determined that only the RMP Program 2 requirements were applicable, written programs and procedures for the Program 3 elements that are above and beyond Program 2 were not developed and not available for review, including:

- Process Safety Information (vs. Safety Information)
- Process Hazard Analysis (vs. Hazard Review)
- Mechanical Integrity (vs. Maintenance)
- Management of Change
- Pre-startup Review
- Employee Participation
- Hot Work Permit
- Contractor Safety

Written programs / procedures for these Program 3 requirements were not available for review, and are there noted in this report under “Findings/Recommendations.”

RMP Program 2 programs and procedures are contained in a RMP Manual, dated 5/7/08. The RMP Manual was well prepared in a table form listing each RMP Program 2 requirement with corresponding description of how that requirement is addressed.

Following are comments regarding specific RMP program elements reviewed by N. P. Mulvey. (Note that as described above, some RMP elements were reviewed by USEPA inspectors and are therefore not included in this report).

#### **Management System [40 CFR 68.15] & Registration**

The EHS Specialist is responsible for development and implementation of the RMP program. The facility (particularly their outside consultant) demonstrated a good understanding of the RMP Program 2 requirements and their written programs / procedures. There was however no written description of management system available for review.

The facility’s registration was reviewed by USEPA.

#### **Process Safety Information (PSI) [40 CFR 68.65]**

The facility maintains process safety information, including:

- MSDSs for chemicals on-site, including 37% HCl
- Block flow diagram (BFD)
- Documentation on equipment used in the process, including equipment specifications

The following PSI related to equipment in the process was not available for review:

- Electrical classification
- Ventilation system design
- Safety system description

### **Process Hazard Analysis (PHA) [40 CFR 68.67]**

A hazard review was conducted on 2/27/08. The hazard review was performed by completing a checklist. The checklist included questions relevant to warehouse operations and distribution. Documentation included checklist questions, reference / source of questions, response, and comments / recommendations.

The hazard review did not include:

- Identification of the consequences of failure of engineering and administrative controls
- An evaluation of human factors
- An evaluation of the range of the possible safety and health effects of failure of controls

There is no record of who participated in the hazard review.

### **Standard Operating Procedures (SOPs) [40 CFR 68.69]**

The facility has written operating procedures for the following operations applicable to a warehouse / distribution center:

- Segregation and storage procedures
- Use of forklifts
- Loading and unloading
- Examination for damaged and labeling
- Stock controls
- Site security
- Bracing and stacking
- Hot work
- Handling damaged containers

The facility also has a Procedures Manual for:

- Receipt of materials
- Recognition of hazards
- Equipment calibration
- Management and handling of drums
- Drum spacing

The written procedures appeared current and up-to-date, although there is no policy for annual review / certification.

### **Training [40 CFR 68.71]**

The facility has written training schedules for 2008 and 2009, including a description of topics covered. Training records were reviewed for a warehouse operator (Mr. Alfredo Melendez), and included:

- Training on operating procedures (4/30/09)
- Written tests as means to verify operator understanding of training received
- Training on DOT security, safe work practices, fire extinguishers, contingency plan, respirators, and HAMAT
- Training of safe forklift driving techniques, including certification of completion

Training documentation included date of training, name of instructor, topic covered, and written tests. Excellent training records.

### **Mechanical Integrity [40 CFR 68.73]**

As a distribution center, the mechanical integrity requirements are minimal, however the following type of equipment should be included in a mechanical integrity inspection and test schedule:

- Forklift trucks for transport of containers storing RMP regulated chemicals
- Fire alarm / suppression systems
- Ventilation systems (if applicable)
- Storage racks (if applicable)

Inspection records available for review included the fire protection system (Certification of Inspection; 4/21/09; 2008; 2007; included detailed checklist) and the forklift trucks (daily checklist).

### **Compliance Audits [40 CFR 68.79]**

The facility reported that development of the RMP program constituted the first RMP compliance audit. Given the initial RMP registration submission date of May 6, 2008, the first three-year audit is due in May 2011.

### **Incident Investigation [40 CFR 68.81]**

Reviewed by USEPA.

### **Emergency Response [40 CFR 68.90 – 68.95]**

Reviewed by USEPA.

## **FACILITY TOUR**

Several items noted during the facility tour include:

- Housekeeping at the facility was excellent.

## **FINDINGS/RECOMMENDATIONS**

### **Registration Information**

- The facility is registered as a Program 2 facility. The facility has a written analysis of why they believe Program 2 applies. The facility determined that the ‘retail facility’ exemption applies and that the process is exempt from OSHA’s PSM standard. Sachs Chemical distributes materials (including the 37% hydrochloric acid) to pharmaceutical companies and other manufacturers. The facility therefore receives 100% of its income from sales to other businesses, and not to end users (i.e., homeowners) as defined by OSHA. **The facility should reevaluate its applicability determination and correct its RMP registration as a Program 3 process. The facility must then develop and implement the Program 3 procedures, in addition to the existing Program 2 procedures, as required by 40 CFR 68.10 and .12(d).**

### **Management System [40 CFR 68.15]**

- The EHS Specialist is responsible for development and implementation of the RMP program. The facility (particularly their outside consultant) demonstrated a good understanding of the RMP Program 2 requirements and their written programs / procedures. There was however no written description of management system available for review. **The facility should develop a written description of its RMP management system, as required by 40 CFR 68.15.**

### **Process Safety Information (PSI) [40 CFR 68.65]**

- PSI related to equipment in the process not available for review included, electrical classification, ventilation system design, and safety system description. **The facility should develop PSI related to electrical classification, ventilation system design, and safety system description, as required by 40 CFR 68.65(d)(1)(iii), (iv), and (viii).**

### **Process Hazard Analysis (PHA) [40 CFR 68.67]**

- The hazard review did not include identification of the consequences of failure of engineering and administrative controls, an evaluation of human factors, or an evaluation of the range of the possible safety and health effects of failure of controls. **The facility should update the PHA to include an identification of the consequences of failure of engineering and administrative controls, an evaluation**

**of human factors, and an evaluation of the range of the possible safety and health effects of failure of controls, as required by 40 CFR 68.67(c)(4), (6), and (7).**

- There is no record of who participated in the hazard review. **The facility should ensure that the PHA is completed by a team, as required by 40 CFR 68.67(d).**

#### **Standard Operating Procedures (SOPs) [40 CFR 68.69]**

- The written procedures appeared current and up-to-date, although there is no policy for annual review / certification. **The facility should certify annually that the operating procedures are current and accurate and that procedures have been reviewed as often as necessary, as required by 40 CFR 68.69(c).**

#### **Mechanical Integrity [40 CFR 68.73]**

- Inspection records were available for review for the fire protection system and forklift trucks. No records were available for the ventilation system. **The facility should perform inspections and tests of RMP regulated equipment, including the building ventilation system, consistent with accepted good engineering practices, as required by 40 CFR 68.73(d).**

#### **Management of Change (MOC) [40 CFR 68.75]**

- Since the facility had determined that the process was subject to Program 2 requirements, no management of change procedure was available for review. **The facility is subject to Program 3 requirements and should therefore develop and implement a management of change procedure, as required by 40 CFR 68.75.**

#### **Pre-Startup Review (PSR) [40 CFR 68.77]**

- Since the facility had determined that the process was subject to Program 2 requirements, no pre-startup review procedure was available for review. **The facility is subject to Program 3 requirements and should therefore develop and implement a pre-startup review procedure, as required by 40 CFR 68.77.**

#### **Employee Participation [40 CFR 68.83]**

- Since the facility had determined that the process was subject to Program 2 requirements, no written employee participation plan was available for review. **The facility is subject to Program 3 requirements and should therefore develop and implement an employee participation plan, as required by 40 CFR 68.83.**



**Hot Work Permit [40 CFR 68.85]**

- Since the facility had determined that the process was subject to Program 2 requirements, no hot work permit procedure was available for review. **The facility is subject to Program 3 requirements and should therefore develop and implement a hot work permit procedure, as required by 40 CFR 68.85.**

**Contractor Safety [40 CFR 68.87]**

- Since the facility had determined that the process was subject to Program 2 requirements, no contractor safety procedure was available for review. **The facility is subject to Program 3 requirements and should therefore develop and implement a contractor safety procedure, as required by 40 CFR 68.87.**